



Spring 2019 MCAS Tests: Summary of State Results

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I. Introduction

The Massachusetts Comprehensive Assessment System (MCAS) is the Commonwealth's standards-based student assessment program. This report summarizes the state-level results from the spring 2019 administration of MCAS tests in English Language Arts (ELA), Mathematics, and Science and Technology/Engineering (STE). The report examines trends in state results and analyzes changes in academic achievement gaps between demographic groups. For information on school- and district-level MCAS results, please visit the [School and District Profiles website](#).

Which MCAS Tests Were Administered in 2019?

In 2019, Massachusetts continued the process of transitioning the MCAS program to next-generation tests. The next-generation tests include new test designs and item types and are intended to be administered primarily via computer, though the Department is making paper-based versions available during the transition period and will offer paper-based tests on an ongoing basis as an accommodation for some students.

Table 1 shows which MCAS tests were administered at each grade level in spring 2019 and whether the tests were next-generation (NG) or legacy (L) assessments.

Table 1: Spring 2019 MCAS Tests Administered, by Grade Level

Content Area	Grade Level							
	3	4	5	6	7	8	9	10
English Language Arts	NG	NG	NG	NG	NG	NG		NG
Mathematics	NG	NG	NG	NG	NG	NG		NG
Science and Technology/Engineering			NG			NG	L ^a	L ^a

^aStudents may take one of four high school STE tests offered in Biology, Chemistry, Introductory Physics, and Technology/Engineering in grade 9 or grade 10. Results of the grade 9 and 10 tests are summarized and reported in grade 10.

Who Participated in MCAS in 2019?

All students who are enrolled in the tested grades and who are educated at public expense are required by state and federal law to participate in MCAS testing. In spring 2019, a total of 489,865 students in grades 3–8 and 10 participated in at least one MCAS test. On individual tests, the percentage of enrolled students who participated was consistently high, ranging from 98 to 100 percent. These figures include regular education students, students with disabilities, and English learner students.

Section V of this report provides detailed information about the demographics of the student population that was eligible to participate in MCAS testing in 2010, and summarizes changes to the population between 2018 and 2019. For additional information on state-level MCAS participation, go to the [Assessment section of the State Profile](#) on the School and District Profiles website and select “Participation Report.”

MCAS-Alt Participation

Students with significant cognitive disabilities who are unable to take the standard MCAS tests, even with accommodations, are required to participate in the [MCAS Alternate Assessment](#) (MCAS-Alt). The MCAS-Alt enables these students to submit portfolios of their work that demonstrate their performance

on the curriculum framework learning standards. The number of students who took the MCAS-Alt in 2019 is as follows:

ELA: 6,944 students

Math: 7,044 students

STE: 2,878 students

What Were the Administration Guidelines for the Spring 2019 MCAS Tests?

Table 2 provides information about the spring 2019 test administrations, including administration dates, numbers of sessions, and recommended testing times. All MCAS test administrations are untimed. The Department provides recommended session lengths to assist schools with planning.

Table 2: Spring 2019 MCAS Test Administrations

Test	Administration Dates	Number of Sessions	Recommended Testing Time for Spring 2019
ELA Grades 3–8	April 1–May 3 ^a	2	120–150 minutes per session
ELA Grade 10	March 26–27	2	120 minutes per session
Mathematics Grades 3–8	April 2–May 24 ^a	2	90 minutes per session
Mathematics Grade 10	May 21–22	2	90 minutes per session
STE Grades 5 and 8	April 3–May 24 ^a	2	75 minutes per session
STE High School	June 4–5	2	60 minutes per session

^aAt grades 3–8, schools scheduled tests within a testing window.

MCAS test sessions are composed of a variety of questions types, and the number of questions and score points varies by grade and subject. See the [MCAS test designs](#) for detailed information.

How Are MCAS Results Reported?

Student results on the MCAS tests are reported using scaled scores and achievement levels. Students receive a separate score and attain a separate achievement level in each subject area. In this report, performance at the state level is summarized using the percentage of students attaining each achievement level. For reporting next-generation results, a second metric is also used: the average scaled score for the student group being evaluated. The sections below provide more information about these metrics.

Achievement Levels

In March 2017, the Board of Elementary and Secondary Education adopted new achievement levels for the next-generation tests. These next-generation achievement levels differ from the legacy MCAS achievement levels and are reported using a different scale. The next-generation achievement levels are designed to provide an indication of whether a student is on track to succeed in the subject matter and whether extra academic assistance may be needed for the student.

Table 3 presents the achievement levels and scaled scores for the next-generation ELA and Mathematics tests at grades 3–8 and 10. Table 4 presents the achievement levels and scaled scores for the legacy MCAS tests, which in 2019 included the high school STE tests.

Because next-generation MCAS tests are scored on a different scale from the legacy tests, **next-generation scores should not be compared to legacy scores**. In this report, 2019 results from the next-

generation ELA and Mathematics tests at grades 3–8 are compared to results from 2017 and 2018 and not prior years; results from the next-generation grade 10 ELA and math tests, which were first administered in 2019, are not compared to results from prior years.

Table 3: Next-Generation MCAS Achievement Levels

Achievement Level	Scaled Score Range	Definition
Exceeding Expectations	530–560	A student who performed at this level exceeded grade-level expectations by demonstrating mastery of the subject matter.
Meeting Expectations	500–529	A student who performed at this level met grade-level expectations and is academically on track to succeed in the current grade in this subject.
Partially Meeting Expectations	470–499	A student who performed at this level partially met grade-level expectations in this subject. The school, in consultation with the student’s parent/guardian, should consider whether the student needs additional academic assistance to succeed in this subject.
Not Meeting Expectations	440–469	A student who performed at this level did not meet grade-level expectations in this subject. The school, in consultation with the student’s parent/guardian, should determine the coordinated academic assistance and/or additional instruction the student needs to succeed in this subject.

Table 4: Legacy MCAS Achievement Levels

Achievement Level	Scaled Score Range	Definition
<i>Advanced</i>	260–280	Students at this level demonstrate a comprehensive and in-depth understanding of rigorous subject matter and provide sophisticated solutions to complex problems.
<i>Proficient</i>	240–258	Students at this level demonstrate a solid understanding of challenging subject matter and solve a wide variety of problems.
<i>Needs Improvement</i>	220–238	Students at this level demonstrate a partial understanding of subject matter and solve some simple problems.
<i>Failing</i>	200–218	Students at this level demonstrate a minimal understanding of subject matter and do not solve simple problems.

Average Scaled Scores

As shown in Table 3, students receive a scaled score between 440 and 560 for each next-generation test they take. Because of the design of the next-generation scale, the scaled scores for a group of students can be used to calculate an average (mean) scaled score, which indicates average performance for the group. Average scaled scores can be calculated at the classroom, school, district, or state level, or for student subgroups.

In sections III and IV of this report, average scaled scores are used to summarize and compare student achievement on the next-generation tests. A benefit of using average scaled scores is that the performance of *all* students in the group contributes to the measure. Note that average scaled scores are not reported for legacy tests, as the legacy scale was not designed to support this metric.

How Are MCAS Results Used?

MCAS test results are used for four primary purposes:

- to inform and improve curriculum and instruction;
- to evaluate student, school, and district performance according to the Massachusetts curriculum framework content standards and MCAS performance standards;
- at the high school level, to determine whether a student has met the state requirements for the Competency Determination (i.e., whether a student is eligible for a high school diploma) and
- to determine whether a student has met one of the eligibility requirements for the John and Abigail Adams Scholarship and the Stanley Z. Koplik Certificate of Mastery Award.

Information about high school graduation requirements is available at www.doe.mass.edu/mcas/graduation.html; competency determination attainment in 2019 is presented in section VI of this report.

II. Statewide Achievement Level Results

This section reports state-level results from the spring 2019 MCAS tests by achievement level. As described on page 2, the Board of Elementary and Secondary Education adopted new achievement levels for the next-generation tests in March 2017. In the figures and tables in this section, results for the ELA and Mathematics tests at grades 3–8 and 10, and the STE tests at grades 5 and 8, are reported using the next-generation achievement levels (Exceeding Expectations, Meeting Expectations, Partially Meeting Expectations, Not Meeting Expectations). Results for the high school STE tests are reported using the legacy achievement levels (*Advanced, Proficient, Needs Improvement, Failing*).

Student Achievement on Next-Generation Tests in Grades 3–8 and 10

Figure 1 shows the percentage of students scoring at each achievement level on the 2019 next-generation ELA tests.¹ The percentage of students scoring Meeting Expectations or higher ranged from a high of 61% at grade 10 to a low of 48% at grade 7.

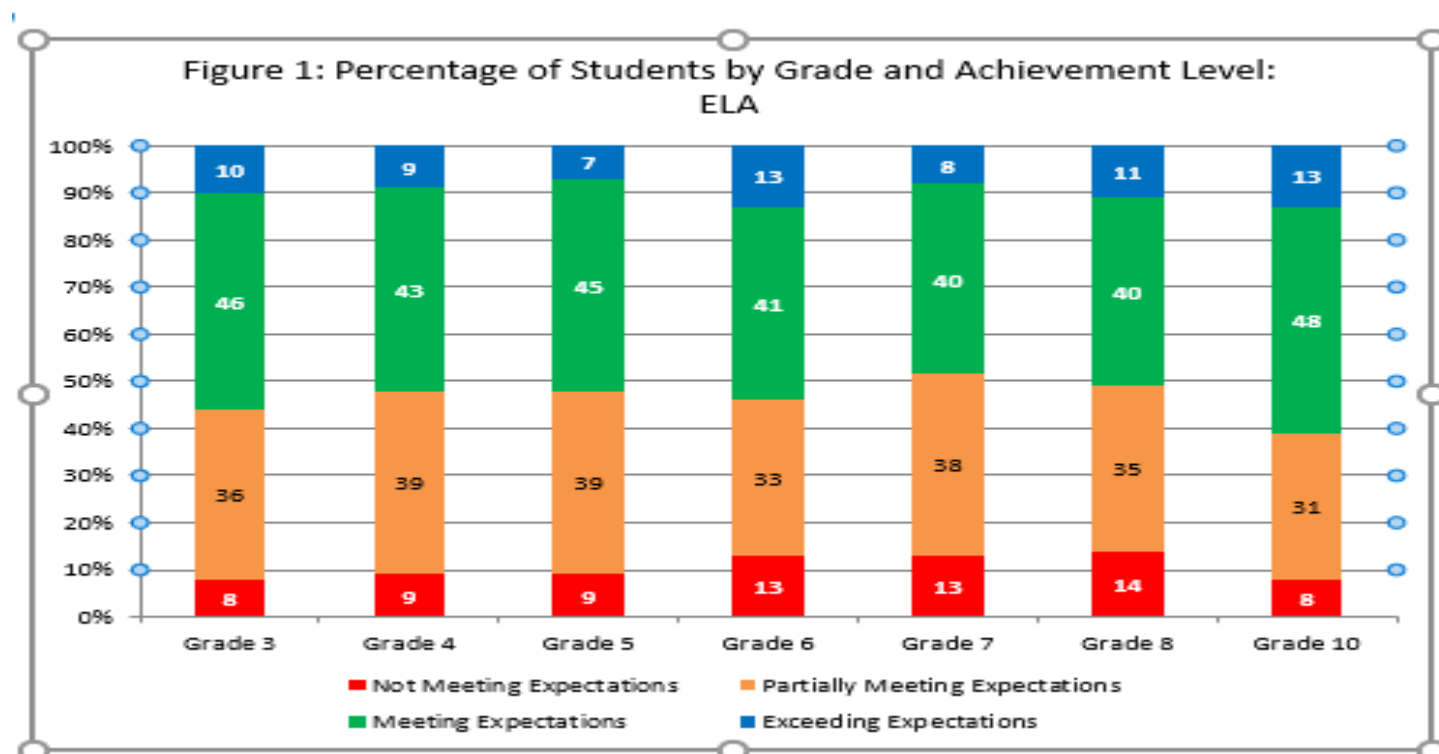


Table 5 summarizes changes in the percentage of students scoring Meeting Expectations or higher on the next-generation ELA tests between 2018 and 2019. Percentage point changes are provided between 2017 and 2019 to illustrate the three-year trend.

Table 5: Percentage Changes in ELA Achievement, 2018–2019, and Three-Year Trend

¹ Due to rounding at individual achievement levels, the percentages in this figure, and in other figures in this report, may not add up to 100%. For the same reason, when percentages for Meeting Expectations and Exceeding Expectations are aggregated to report the percentage of students at “Meeting Expectations or higher,” the sum of the percentages for the individual achievement levels may not equal the aggregated total.

Grade	Percentage of Students Scoring Meeting Expectations or Higher in ELA			2018–2019 Percentage Point Change	2017–2019 Percentage Point Change since Inception in 2017
	2017	2018	2019		
Grade 3	47	52	56	+4	+9
Grade 4	48	53	52	-1	+4
Grade 5	49	54	52	-2	+3
Grade 6	51	51	53	+2	+2
Grade 7	50	46	48	+2	-2
Grade 8	49	51	52	+1	+3
Grades 3-8	49	51	52	+1	+3
Grade 10	n/a	n/a	61	--	--

Figure 2 shows the percentage of students scoring at each achievement level on the 2019 next-generation Mathematics tests. The percentage of students scoring Meeting Expectations or higher ranged from a high of 59% at grade 10 to a low of 46% at grade 8.

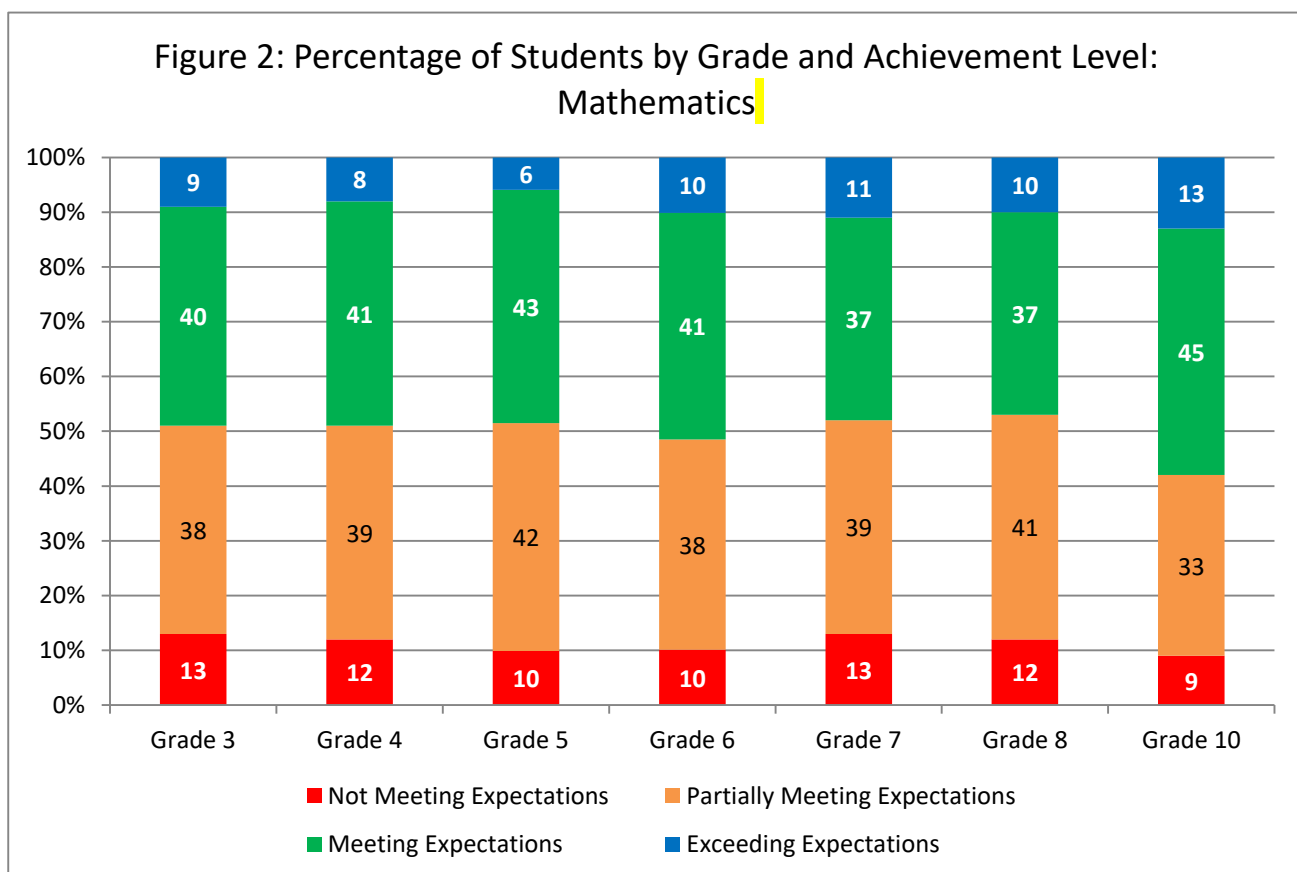


Table 6 summarizes changes in the percentage of students scoring Meeting Expectations or higher on the next-generation Mathematics tests between 2018 and 2019. Percentage point changes are provided between 2017 and 2019 to illustrate the three-year trend.

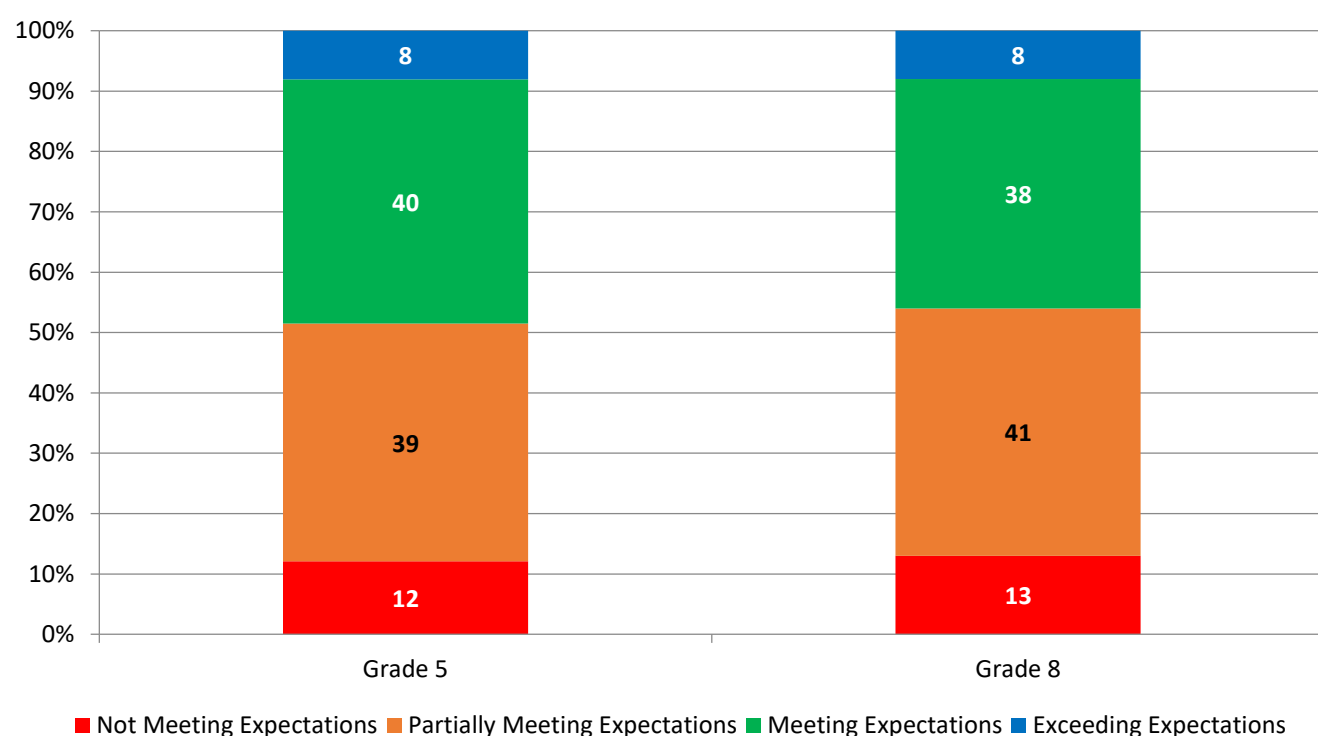
Table 6: Percentage Changes in Mathematics Achievement, 2018–2019, and Three-Year Trend

Grade	Percentage of Students Scoring Meeting Expectations or Higher in Mathematics			2018–2019 Percentage Point Change	Percentage Point Change Since Inception in 2017
	2017	2018	2019		
Grade 3	49	50	49	-1	0
Grade 4	49	48	50	+2	+1
Grade 5	46	46	48	+2	+2
Grade 6	50	47	52	+5	+2
Grade 7	47	46	48	+2	+1
Grade 8	48	50	46	-4	-2
Grades 3-8	48	48	49	+1	+1
Grade 10	59	n/a	n/a	--	--

Student Achievement on Next-Generation STE Tests in Grades 5 and 8

In 2019, next-generation STE tests were first administered in grades 5 and 8. Figure 3 shows the percentage of students at each achievement level in both grades on the STE tests. In 2019, 49 percent of students statewide scored Meeting Expectations or higher on the grade 5 STE test, while 46 percent scored Meeting Expectations or higher on the grade 8 STE test.

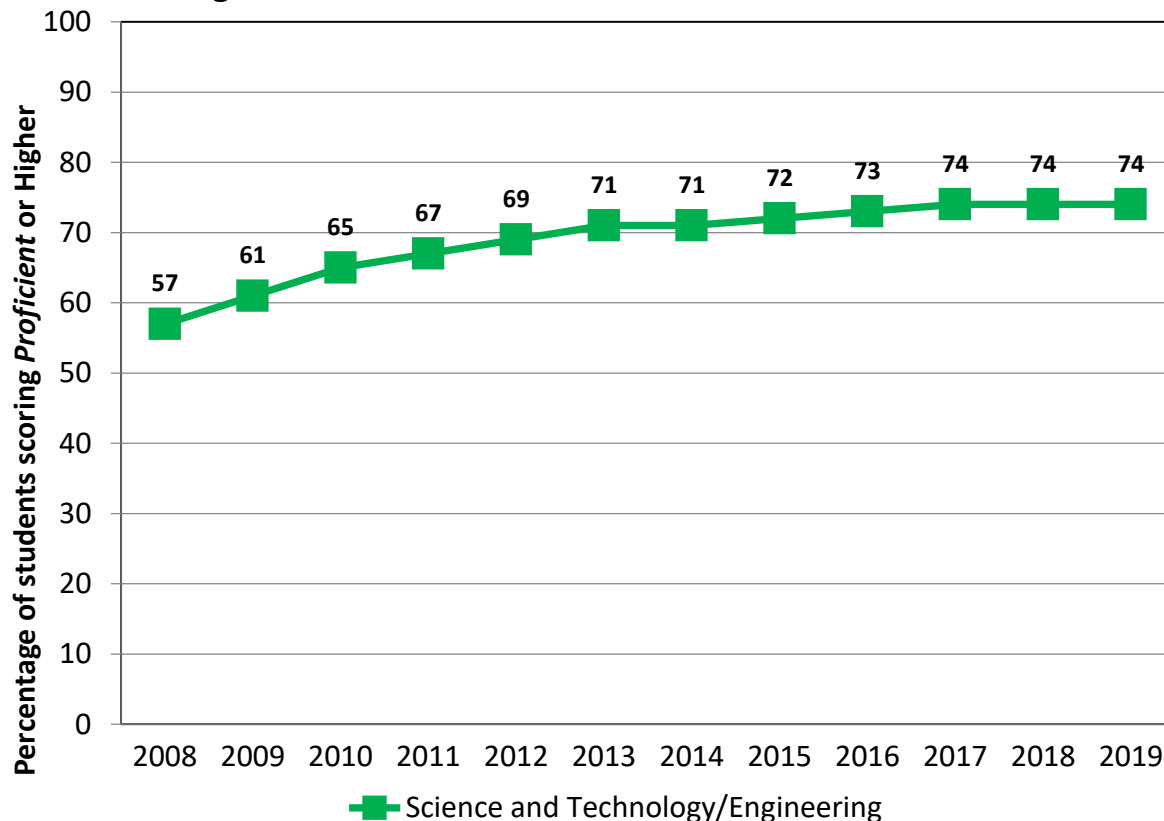
Figure 3: Percentage of Students by Grade and Achievement Level: STE



Student Achievement on Legacy High School STE Tests

Figure 5 shows the percentages of students scoring *Proficient* or higher since the inception of the high school STE tests in 2008. In 2019, the percentage of students scoring Meeting Expectations or higher was unchanged from 2017 at 74 percent.

Figure 4: 2008–2019 Statewide Grade 10 MCAS STE Results



Student Achievement in Commissioner's Districts

The Department of Elementary and Secondary Education provides support through the Office of District and School Turnaround for the Commonwealth's 10 largest urban districts, sometimes referred to as the "Commissioner's Districts." The figures below summarize performance within the Commissioner's Districts on the 2019 next-generation tests at grades 3–8 and 10. For each district, the figures show the percentage of students scoring at each achievement level in ELA and Mathematics and the grades 5 and 8 STE tests.

Figure 5: Commisioner's Districts 2019 MCAS Performance
ELA Grades 3–8

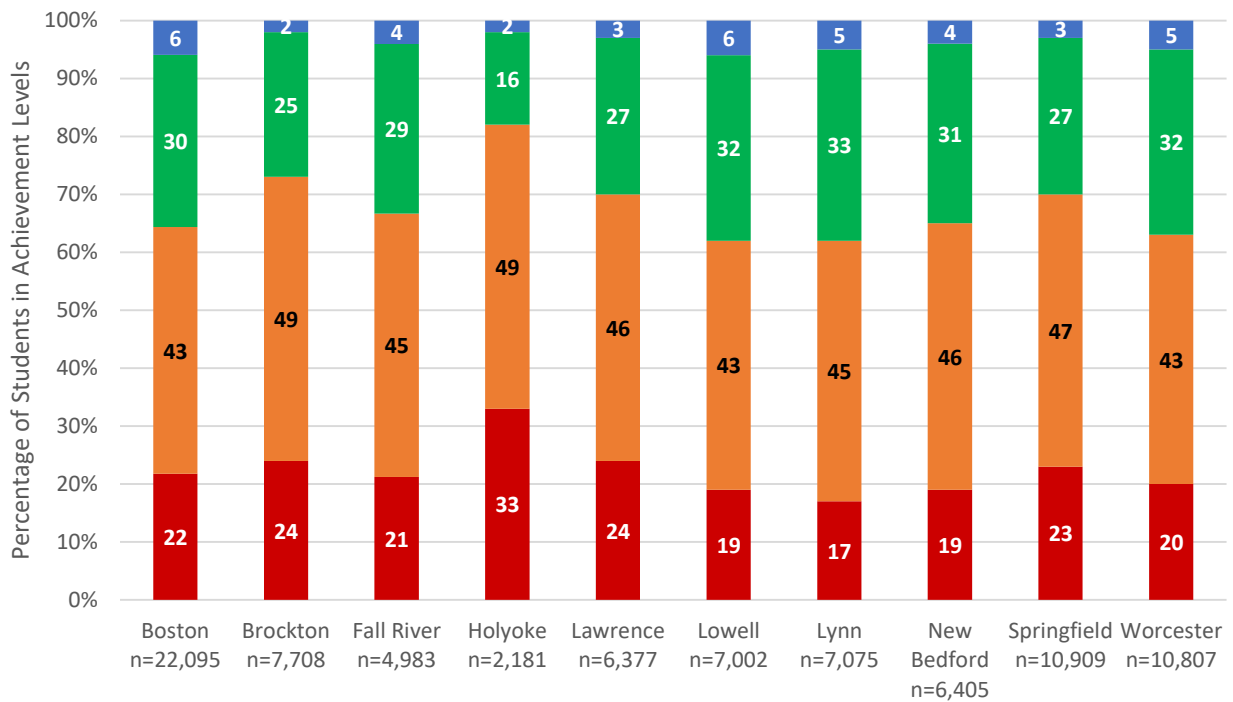


Figure 6: Commisioner's Districts 2019 MCAS Performance
ELA Grade 10

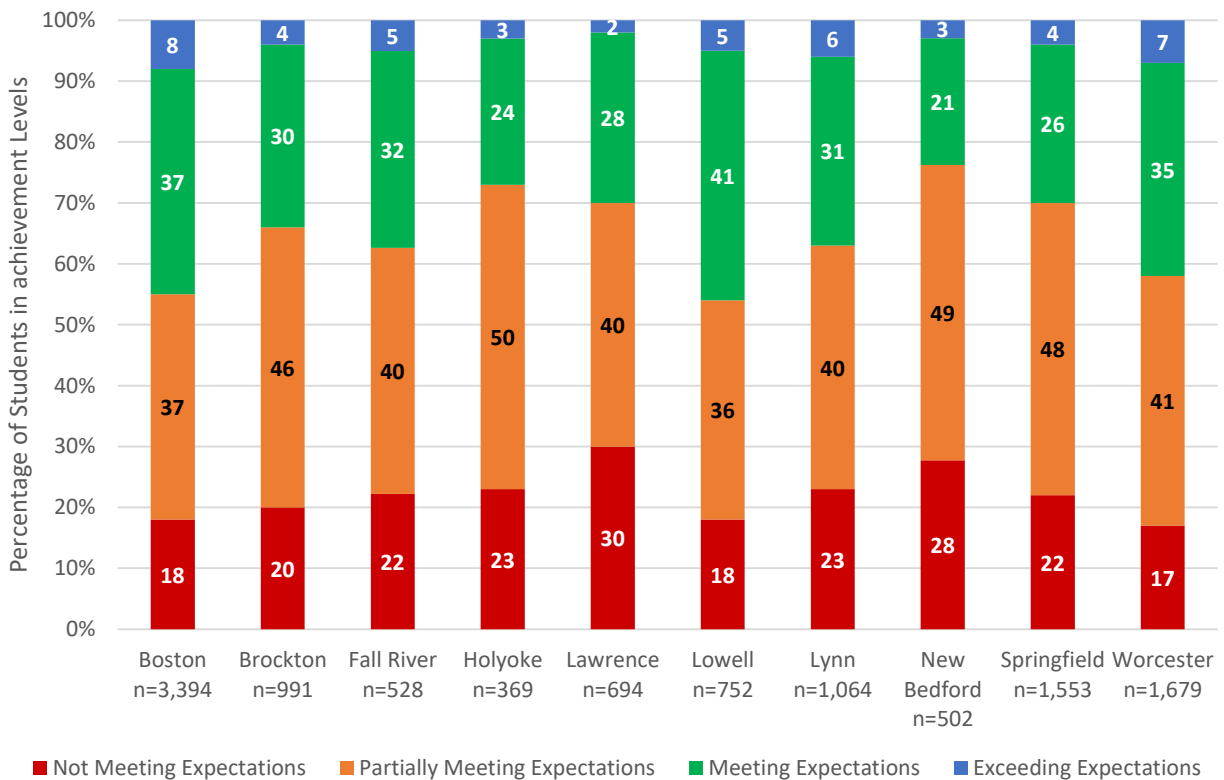


Figure 7: Commisioner's Districts 2019 MCAS Performance
Math Grades 3–8

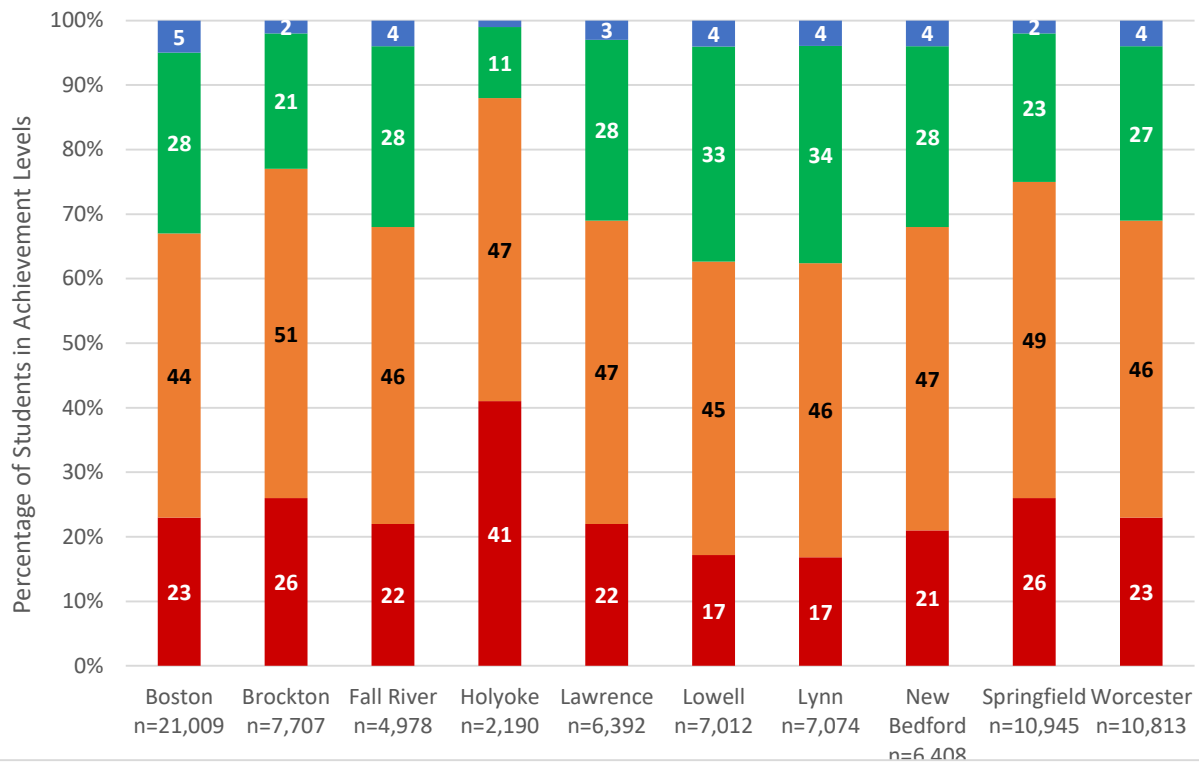


Figure 8: Commisioner's Districts 2019 MCAS Performance
Math Grade 10

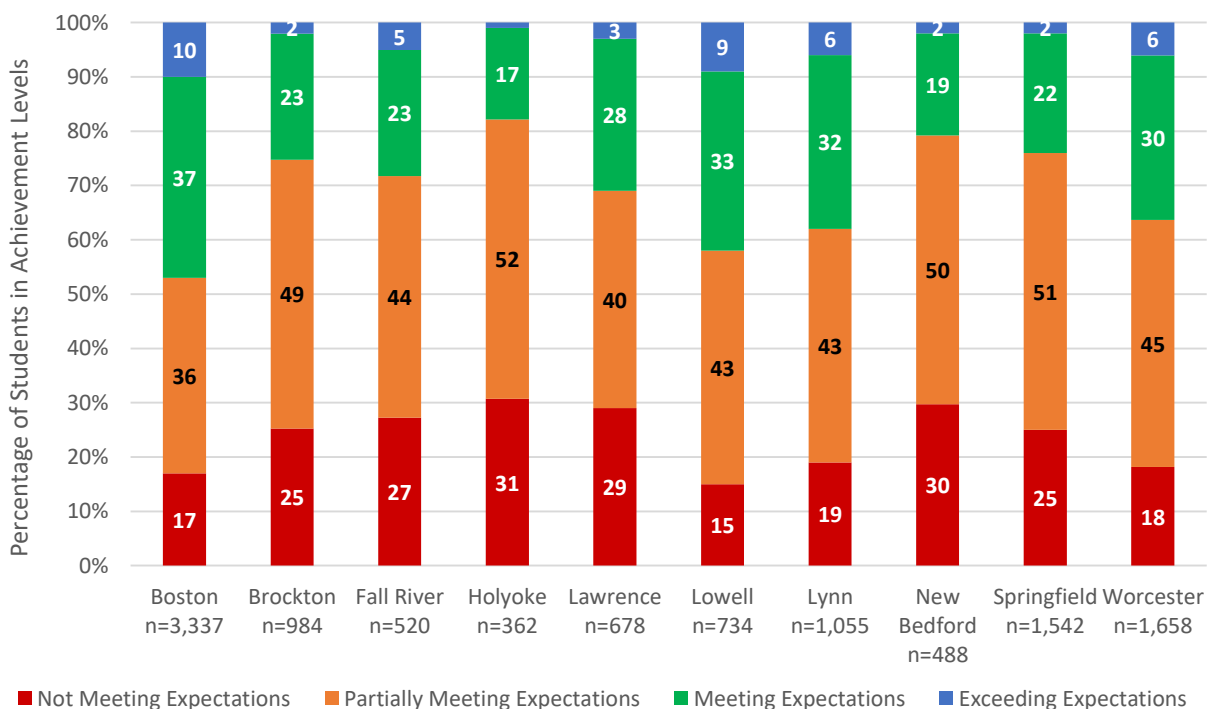


Figure 9: Commisioner's Districts 2019 MCAS Performance
STE Grade 5

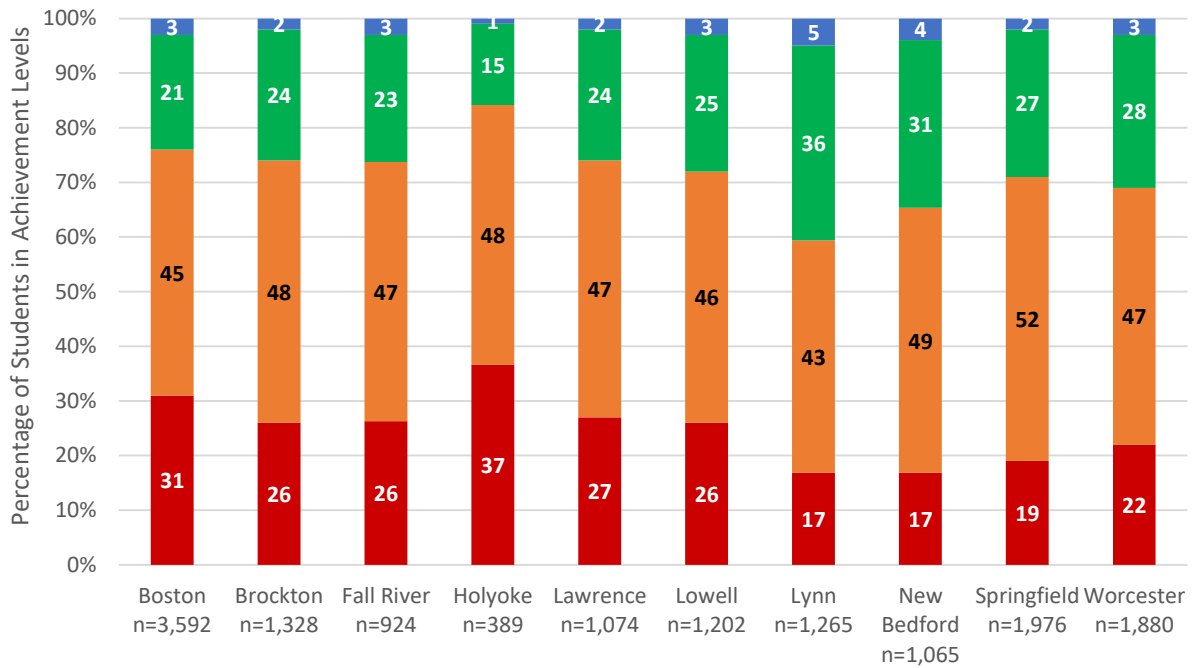
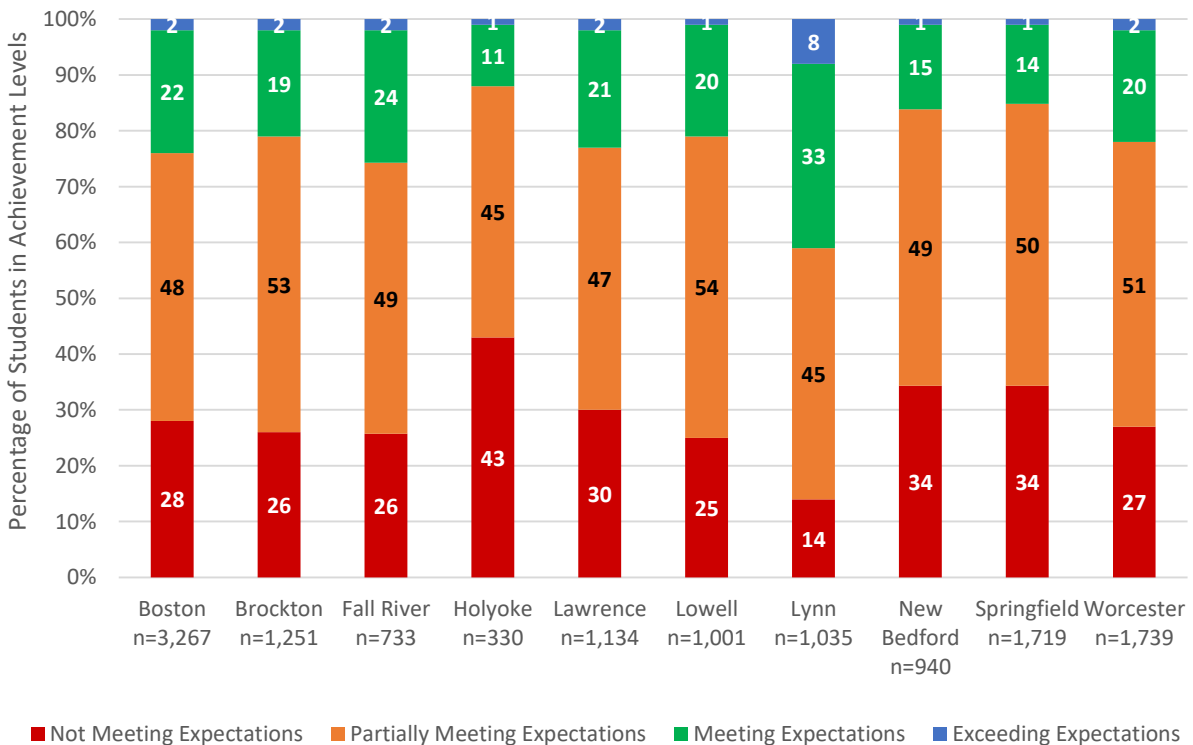


Figure 10: Commisioner's Districts 2019 MCAS Performance
STE Grade 8



III. Statewide Scaled Score Results for Next-Generation Tests

This section reports state-level results from the spring 2019 next-generation MCAS tests by average scaled score. As described on page 3, students receive a scaled score between 440 and 560 for each next-generation test they take. The scaled scores for a group of students can be used to calculate an average (mean) scaled score, which indicates average performance for the group.² By comparing the average scaled score to the score ranges for the next-generation achievement levels, shown in Table 7, a determination can be made about whether, on average, the students in the group are meeting expectations.

Table 7: Next-Generation Achievement Levels and Scaled Scores

Achievement Level	Scaled Score Range
Exceeding Expectations	530–560
Meeting Expectations	500–529
Partially Meeting Expectations	470–499
Not Meeting Expectations	440–469

Average Scaled Scores and Standard Deviation

Table 8 shows the average scaled score for all students in the state, by grade, for next-generation ELA Mathematics, and grades 5 and 8 STE. At all grades, the average scaled score is just above or below 500, the cut point for the Meeting Expectations achievement level. The table also presents the standard deviation for each grade level in each subject. The standard deviation is a measure of the amount of variation in student performance.

Table 8: Average State-Level Scaled Scores and Standard Deviation, by Grade

Grade	ELA Average Scaled Score	ELA Standard Deviation	ELA Number of Students	Math Average Scaled Score	Math Standard Deviation	Math Number of Students	STE Average Scaled Score	STE Standard Deviation	STE Number of Students
3	504.1	22.1	66,907	499.4	23.9	66,993			
4	501.8	21.3	68,811	499.2	22.9	68,791			
5	501.2	21.3	71,020	498.5	21.2	71,016	498.9	23.3	70997
6	501.3	26.0	71,289	500.8	23.3	71,261			
7	499.0	23.3	70,150	498.2	24.7	70,122			
8	499.8	24.8	69,820	499.0	23.3	69,799	498.2	23.1	69605
3–8	501.2	23.3	417,997	499.2	23.3	417,982	498.6	23.2	140602
10	506.2	23.5	69,901	505.1	23.4	69,478			

² Due to rounding, average scaled scores in this report may differ in some instances by one-tenth of a point from average scaled scores reported in the Department's online systems.

Average Scaled Scores by Grade for Racial/Ethnic Groups

Table 9 shows the average scaled scores for 2017, 2018, and 2019 in grades 3–8, in ELA and Mathematics, for the state’s largest racial/ethnic reporting groups. For grade 10 ELA and Mathematics, and for grades 5 and 8 STE, average scaled scores are available for 2019 only, the first year of next-generation tests in those subjects. The grades 3–8 data illustrate the change in performance for each group and allow for comparisons between groups and between grade levels. Grades 3–8 and 10 results for other student groups, including grade-level results, are available in the statewide [Next Generation MCAS Achievement Report](#) on the School and District Profiles website.

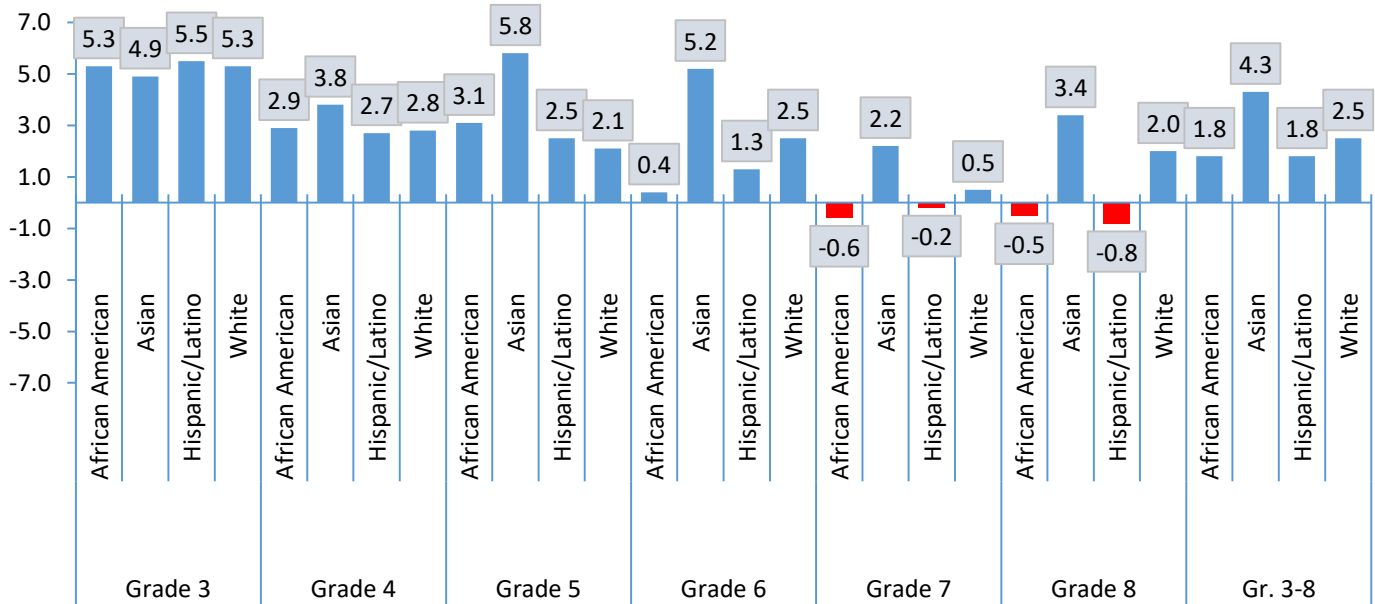
Table 9: Average Scaled Score by Grade for Racial/Ethnic Groups in 2017, 2018 and 2019

Grade	Student Group	ELA			Mathematics			STE
		2017	2018	2019	2017	2018	2019	2019
Grade 3	African American	489.9	493.5	495.2	488.4	488.5	488.2	
	Asian	508.4	511.2	513.3	513.1	514.8	514.2	
	Hispanic/Latino	489.3	493.2	494.8	489.3	489.8	488.8	
	White	502.2	505.5	507.5	502.0	503.6	503.0	
Grade 4	African American	489.6	492.0	492.5	486.2	487.3	487.6	
	Asian	508.2	511.8	512.0	512.5	512.6	514.6	
	Hispanic/Latino	489.7	491.8	492.4	488.4	488.0	489.3	
	White	502.6	505.5	505.4	501.2	501.3	502.8	
Grade 5	African American	489.7	492.2	492.8	488.4	487.6	489.2	486.5
	Asian	506.2	512.2	512.0	513.2	511.2	514.2	509.9
	Hispanic/Latino	489.5	492.6	492.0	488.8	488.2	488.7	487.4
	White	502.3	505.2	504.4	501.7	500.6	501.5	503.6
Grade 6	African American	489.4	490.1	489.8	487.0	487.1	489.1	
	Asian	509.5	513.8	514.7	514.9	515.7	519.4	
	Hispanic/Latino	488.5	489.1	489.8	487.5	487.1	489.7	
	White	503.0	504.9	505.5	502.7	502.2	504.3	
Grade 7	African American	489.0	486.6	488.4	486.0	483.8	485.4	
	Asian	509.2	508.3	511.4	515.9	515.1	517.5	
	Hispanic/Latino	487.9	485.1	487.7	485.8	484.0	485.7	
	White	502.5	500.8	503.0	502.1	501.6	502.2	
Grade 8	African American	489.1	486.9	488.6	487.3	487.0	487.5	484.6
	Asian	509.8	512.2	513.2	515.9	516.4	518.4	509.3
	Hispanic/Latino	487.6	485.6	486.8	488.1	486.8	486.9	484.6
	White	502.0	503.3	504.0	502.7	502.0	502.4	503.1
Grades 3-8	African American	489.4	490.3	491.2	487.2	486.9	487.8	485.5
	Asian	508.5	511.6	512.8	514.2	514.3	516.4	509.6
	Hispanic/Latino	488.8	489.7	490.6	488.0	487.4	488.2	486.1
	White	502.4	504.2	504.9	502.1	501.8	502.7	503.3
Grade 10	African American	n/a	n/a	493.8	n/a	n/a	492.3	n/a
	Asian	n/a	n/a	516.8	n/a	n/a	522.5	n/a
	Hispanic/Latino	n/a	n/a	492.0	n/a	n/a	491.0	n/a

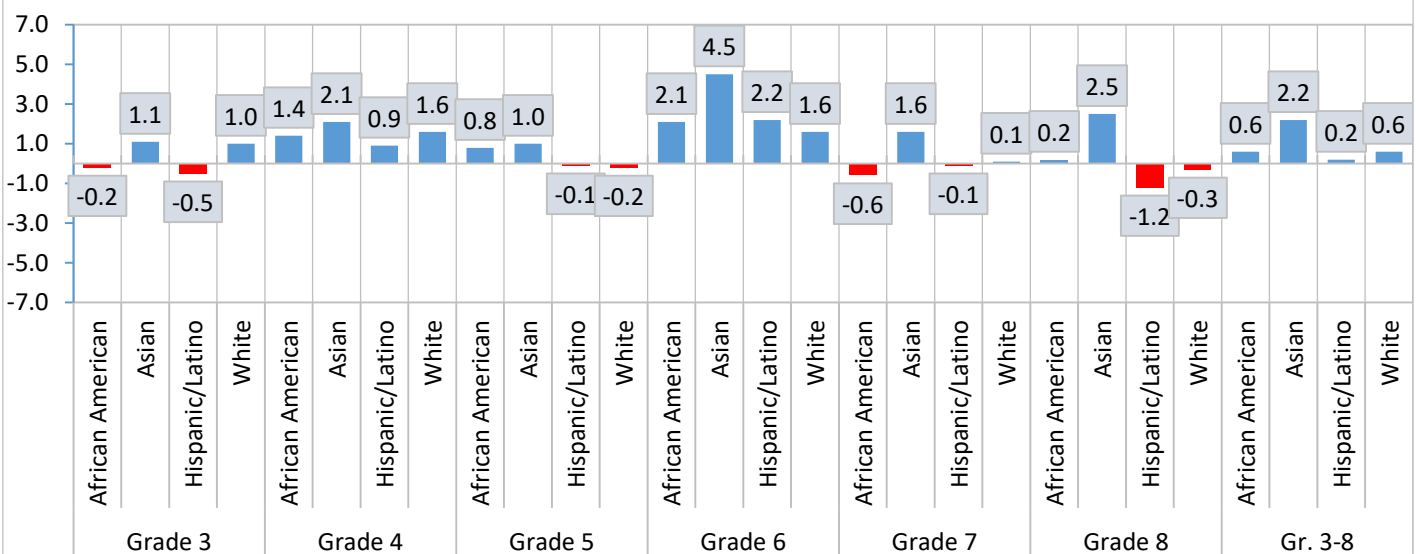
	White	n/a	n/a	510.7	n/a	n/a	509.0	n/a
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Figures 11 and 12 summarize the changes in average scaled scores, from 2017 to 2019, for the state's largest student racial/ethnic reporting groups. In the figures, blue bars represent a positive change in average scaled scores for the three-year period. Red bars represent negative change.

**Figure 11: ELA Average Scaled Score Point Change, 2017–2019,
Large Racial/Ethnic Groups**



**Figure 12: Mathematics Average Scaled Score Point Change, 2017–2019,
Large Racial/Ethnic Groups**



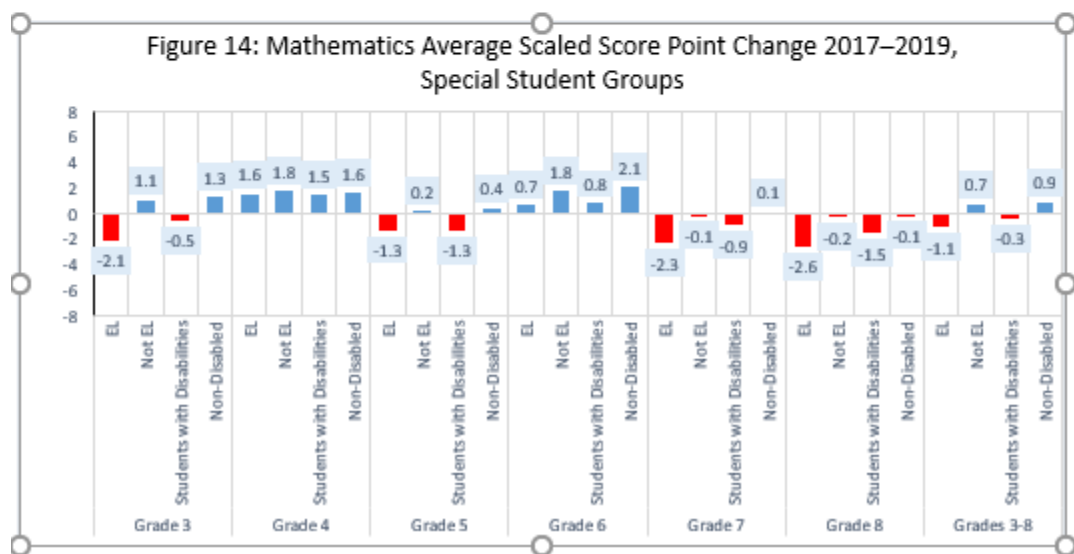
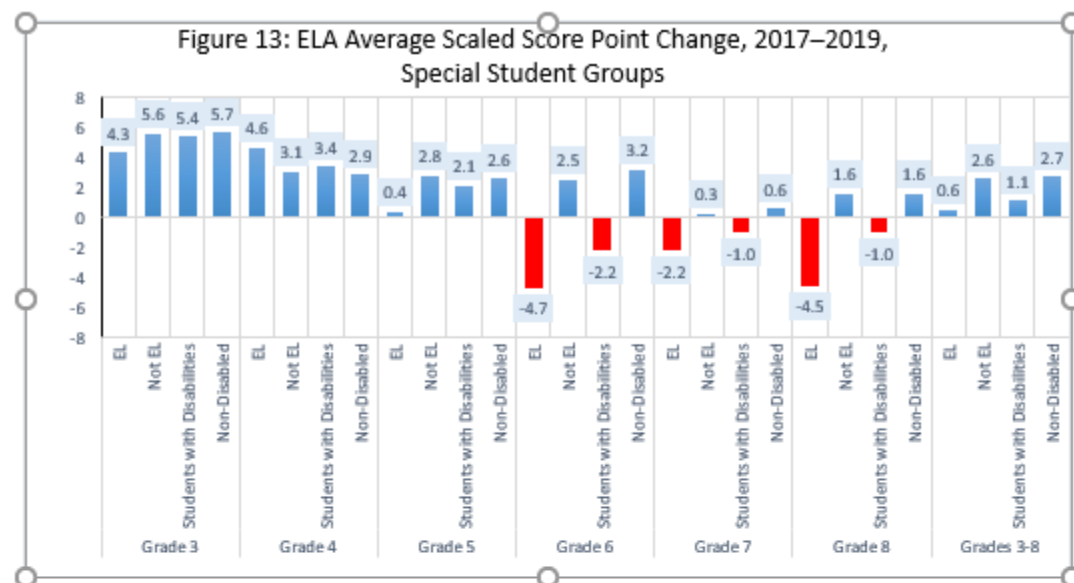
Average Scaled Score by Grade for Special Populations

Table 10 presents the average scaled scores in grades 3–8 and 10, in ELA and Mathematics, for economically disadvantaged students, English learners, and students with disabilities. Scores for 2017 and 2018 are shown for comparison for grades 3–8; scores for grade 10 ELA and Mathematics, and for STE in grades 5 and 8, are included for 2019 only, which is the first year that next-generation tests were administered in those subjects.

Table 10: Average Scaled Score by Grade for Special Populations, 2017–2019

Grade	Student Group	ELA			Mathematics			STE
		2017	2018	2019	2017	2018	2019	2019
Grade 3	Econ. Disadvantaged	489.8	493.6	494.9	489.1	489.9	488.7	
	English Learner (EL)	484.0	487.1	488.3	486.6	486.3	484.5	
	Students with Disabilities	481.0	485.7	486.4	481.2	481.8	480.7	
	All Students	498.8	502.2	504.1	498.8	499.9	499.4	
Grade 4	Econ. Disadvantaged	489.8	492.4	492.4	488.0	488.0	488.9	
	English Learner (EL)	479.4	483.2	484.0	481.6	482.2	483.2	
	Students with Disabilities	480.9	483.6	484.2	478.8	479.2	480.3	
	All Students	499.2	501.8	501.8	498.0	497.9	499.2	
Grade 5	Econ. Disadvantaged	489.6	492.8	491.9	488.8	488.3	488.5	488.0
	English Learner (EL)	478.3	480.7	478.7	481.3	480.3	480.0	474.0
	Students with Disabilities	480.5	484.4	482.6	481.5	480.9	480.2	481.1
	All Students	498.9	501.9	501.2	498.7	497.5	498.5	498.9
Grade 6	Econ. Disadvantaged	489.0	489.7	489.2	487.9	487.5	489.5	
	English Learner (EL)	474.7	472.9	470.0	477.1	476.0	477.8	
	Students with Disabilities	480.1	479.6	477.9	479.6	479.0	480.4	
	All Students	499.4	501.0	501.3	499.2	498.6	500.8	
Grade 7	Econ. Disadvantaged	488.5	485.6	487.6	486.5	484.8	485.6	
	English Learner (EL)	474.0	468.5	471.8	475.8	472.3	473.5	
	Students with Disabilities	479.0	475.2	478.0	478.2	476.5	477.3	
	All Students	499.1	497.0	499.0	498.7	497.5	498.2	
Grade 8	Econ. Disadvantaged	488.0	486.4	487.1	488.2	487.1	486.8	485.6
	English Learner (EL)	472.9	467.2	468.4	477.3	475.6	474.7	469.1
	Students with Disabilities	478.3	475.9	477.3	479.7	477.8	478.2	479.9
	All Students	498.9	499.1	499.8	499.6	498.8	499.0	498.2
Gr. 3-8	Econ. Disadvantaged	489.2	490.2	490.6	488.1	487.7	488.0	486.9
	English Learner (EL)	478.4	478.7	479.0	481.1	480.1	480.1	471.9
	Students with Disabilities	480.0	480.8	481.1	479.8	479.2	479.5	480.5
	All Students	499.0	500.5	501.2	498.8	498.4	499.2	498.5
Gr. 10	Econ. Disadvantaged	n/a	n/a	493.4	n/a	n/a	492.1	
	English Learner (EL)	n/a	n/a	468.2	n/a	n/a	475.5	
	Students with Disabilities	n/a	n/a	486.2	n/a	n/a	483.8	
	All Students	n/a	n/a	506.2	n/a	n/a	505.1	

Figures 13 and 14 show the three-year changes in average scaled scores for grades 3–8, from 2017 to 2019, for English learners and students with disabilities. For comparison, the figures also display data for students who are not in these programs. In the figures, blue bars represent a positive change in average scaled scores for the two-year period. Red bars represent negative change.



IV. Statewide Achievement Gaps

In 2010, Massachusetts passed legislation requiring the state to monitor achievement gaps and authorizing the Department of Elementary and Secondary Education to take steps to intervene and attempt to close those gaps through its school accountability and assistance programs.

This section presents information about academic achievement gaps in Massachusetts through 2019. The Department defines an achievement gap as a disparity in academic performance between two

demographic groups. The figures and tables displayed here identify achievement gaps that are based on race, special education status, or English learner status.

For the next-generation ELA and Mathematics tests at grades 3–8 and 10, achievement gaps are measured in this report using the MCAS average scaled score for each group. Because next-generation test scores cannot be directly compared to scores from legacy MCAS tests, reporting on achievement gaps for next-generation tests in ELA and Mathematics in grades 3–8 is limited to data from the 2017–2019 administrations. For grade 10, and for grades 5 and 8 STE, achievement gaps are only available for 2019, which is the first year that next-generation tests were administered in those subjects.

For the legacy high school STE test, achievement gaps are measured in this report based on the percentage of students in each group scoring *Proficient* or higher. Because results from these tests continue to be reported using legacy MCAS achievement levels, the Department is able to report on trends in the achievement gaps over a longer timeframe.

Achievement Gaps on Next-Generation Tests

The figures below show the size of the achievement gaps, in average scaled score (SS) points, for the 2017–2019 next-generation ELA and Mathematics tests at grades 3–8. For the grades 5 and 8 STE tests, and for the grade 10 ELA and Mathematics tests, achievement gaps are provided for 2019 only, which was the first year next-generation tests were administered in those grades and subjects. Figure 15 displays the ELA achievement gaps, Figure 16 displays the Mathematics achievement gaps, and Figure 17 displays the STE achievement gaps. See Tables 9 and 10 in section III for data showing the actual average scaled scores for each group.

Figure 15: 2017–2019 ELA Average Scaled Score Achievement Gaps
Grades 3–8

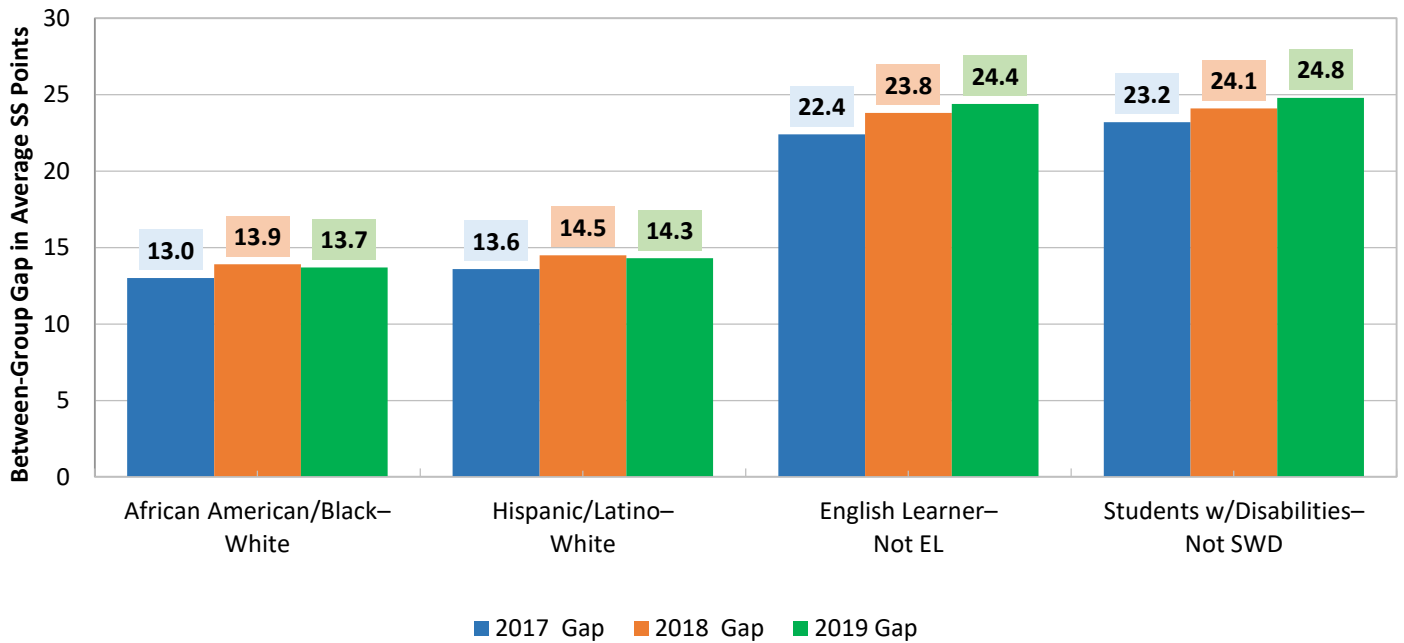
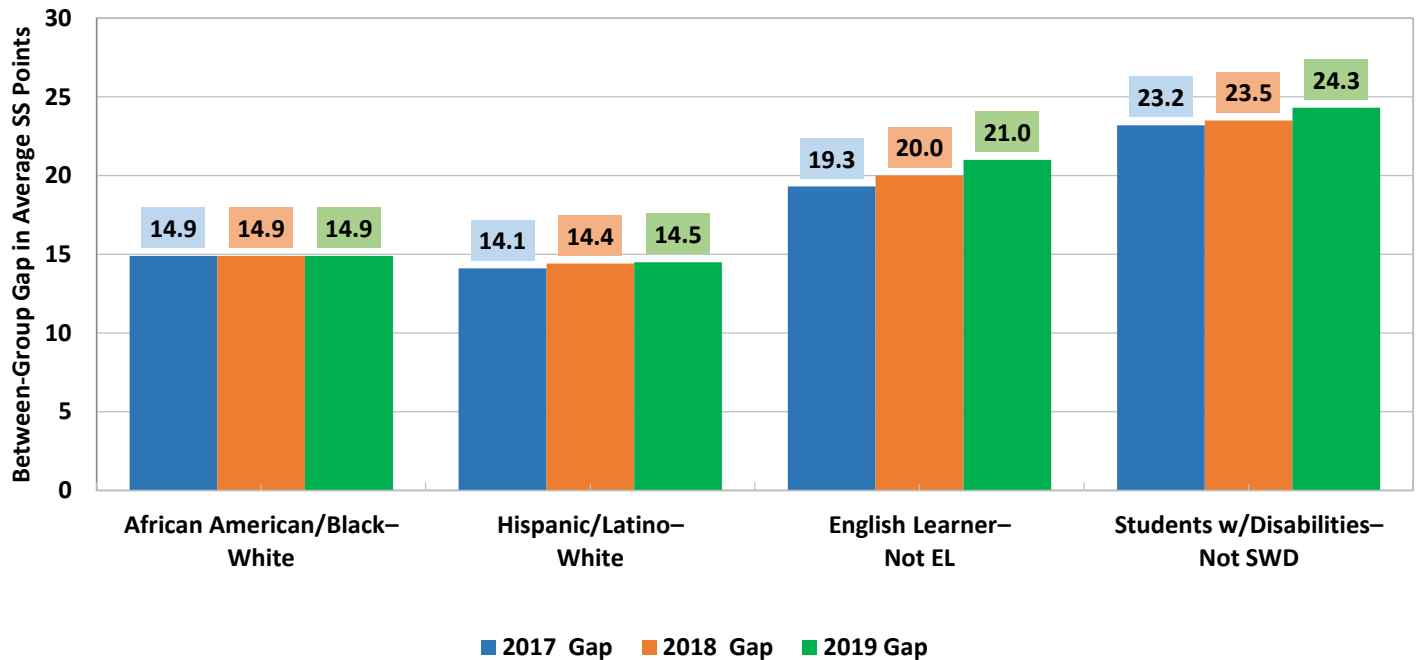


Figure 16: 2017–2019 Mathematics Average Scaled Score Achievement Gaps
Grades 3–8



Achievement Gaps on Legacy STE Tests

Tables 11 and 12 summarize changes that occurred between 2008 and 2019 in the achievement gaps between African American/Black students and white students, and between Hispanic or Latino students and white students, on legacy MCAS STE tests. Data for 2018 are included to illustrate the one-year trend.

**Table 11: 2008–2019 Change in Statewide Achievement Gaps
between African American/Black Students and White Students**

Grade/ Test	African American/Black			White			Eleven-Year Between-Group Gap		
	Percentage of Students Scoring <i>Proficient</i> or Higher						2008	2019	Between-Group Gap Change, 2008–2019 ^a
	2008	2018	2019	2008	2018	2019			
10 STE	28	55	54	65	82	81	37	27	-10

^a Negative value represents narrowing of between-group gap; positive value represents widening of gap.

**Table 12: 2008–2019 Change in Statewide Achievement Gaps
between Hispanic or Latino Students and White Students**

Grade/ Test	Hispanic or Latino			White			Eleven-Year Between-Group Gap		
	Percentage of Students Scoring <i>Proficient</i> or Higher						2008	2019	Between-Group Gap Change, 2008–2019 ^a
	2008	2018	2019	2008	2018	2019			
10 STE	24	51	53	65	82	81	41	28	-13

^a Negative value represents narrowing of between-group gap; positive value represents widening of gap.

Tables 13 and 14 summarize changes that occurred between 2008 and 2019 in the achievement gaps between students with disabilities and all students, and between English learner students and all students, on legacy MCAS tests.

Table 13: 2008–2019 Change in Statewide Achievement Gaps between Students with Disabilities and Non-Disabled Students									
Grade/ Test	Students with Disabilities			Not SWD			Eleven-Year Between-Group Gap		
	Percentage of Students Scoring <i>Proficient</i> or Higher						2008	2019	Between-Group Gap Change, 2008–2019 ^a
	2008	2018	2019	2008	2018	2019			
10 STE	21	39	38	64	82	82	43	44	+1

^a Negative value represents narrowing of between-group gap; positive value represents widening of gap.

Table 14: 2008–2019 Change in Statewide Achievement Gaps between English Learner Students and Non-English Learner Students									
Grade/ Test	EL Students			Not EL			Eleven-Year Between-Group Gap		
	Percentage of Students Scoring <i>Proficient</i> or Higher						2008	2019	Between-Group Gap Change, 2008–2019 ^a
	2008	2018	2019	2008	2018	2019			
10 STE	12	18	18	58	77	77	46	59	+13

^a Negative value represents narrowing of between-group gap; positive value represents widening of gap.

V. Student Enrollment and Participation

This section profiles the statewide student population that was eligible to participate in MCAS testing in 2019 and summarizes changes to the population between 2017 and 2019. Participation rates for the spring 2018 tests are also presented.

2019 Student Enrollment

Figure 18 shows the 2019 statewide student enrollment in grades 3–8 and 10 by race/ethnicity. Table 15 shows the two-year enrollment changes in those grades levels for racial/ethnic groups and other student groups.

Figure 18: 2019 Student Enrollment in Grades 3–8 and 10 by Race/Ethnicity

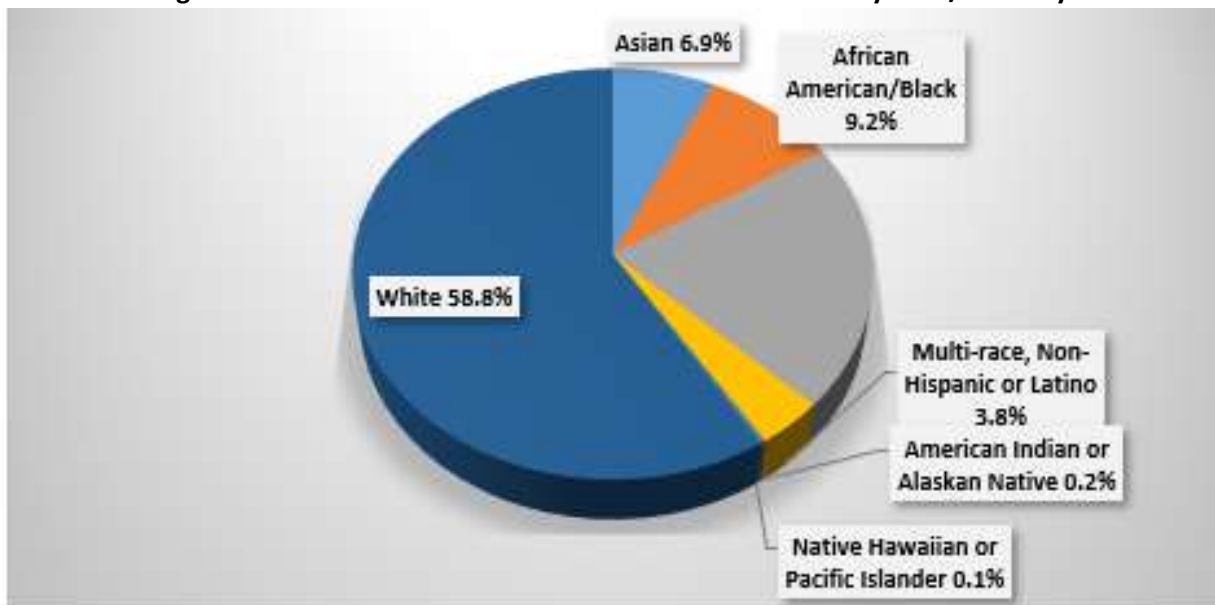


Table 15: Two-Year Enrollment Changes in Grades 3–8 and 10

Race/Ethnicity	2018 Enrolled Students	2019 Enrolled Students	Percent Group Change
Asian	34,558	35,082	0.1%
African American/Black	45,863	46,331	0.1%
Hispanic or Latino	103,177	106,586	0.7%
Multi-race, Non-Hispanic or Latino	18,239	19,088	0.2%
American Indian or Alaskan Native	1,114	1,137	0.0%
Native Hawaiian or Pacific Islander	448	414	0.0%
White	304,214	297,501	-1.3%
Total	507,613	506,139	-0.3%

Other Student Groups	2018 Enrolled Students	2019 Enrolled Students	Percent Group Change
Male	260,342	246,366	-2.8%
Female	247,208	259,727	2.5%
English Learner	48,798	50,042	0.2%
Economically Disadvantaged	172,553	182,939	2.0%
Students with Disabilities	98,047	99,792	0.3%

2019 Participation Rates

Table 16 presents information on the number and percentage of enrolled students who participated in the spring 2019 MCAS tests. The figures include participation rates for students administered the standard MCAS and the MCAS Alternate Assessment (MCAS-Alt); enrolled students educated with public funds, including regular education students; students with disabilities; and EL students. As in previous years, participation rates were very high, ranging from 98 to 100 percent.

Table 16: Number and Percentage of Enrolled Students Tested, Spring 2019

Grade	English Language Arts		Mathematics		Science and Technology/Engineering ^a	
	Number	Percent	Number	Percent	Number	Percent
Grade 3	69,298	99	69,305	100		
Grade 4	71,110	99	71,082	100		
Grade 5	73,359	100	73,333	100	72,974	99
Grade 6	73,643	99	73,620	99		
Grade 7	72,594	99	72,602	99		
Grade 8	72,297	99	72,294	99	72,275	99
Grade 10	72,735	98	72,589	98	72,794	99

^aGrade 10 STE figures include students in the class of 2021 who participated in an STE test in grade 9 in 2018 or grade 10 in 2019; only students continuously enrolled in Massachusetts public schools from fall of grade 9 through spring of grade 10 are included.

How is participation calculated?

Participation rates indicate the number of students who participated in standard MCAS tests and the MCAS Alternate Assessment (MCAS-Alt) divided by the number of students enrolled on the date the tests were administered. EL students enrolled in U.S. schools for the first time were not required to take ELA tests; however, they were reported in ELA school and district participation rates based on their participation in the ACCESS for ELLs (Assessing Comprehension and Communication in English State-to-State for English Language Learners) tests. The Department used ACCESS for ELLs testing for state and federal accountability purposes, which require that all EL students, with the exception of students for whom an accommodation was not available, participate in the EL assessment.

Students absent during testing, including students not tested for medical reasons, were counted against school and district participation as non-participants. Students who transfer out of their school and/or district during the testing window are excluded from the corresponding school/district participation calculations.

How are absent students treated in MCAS performance results?

The federal Elementary and Secondary Education Act requires that absent students be counted as non-participants for school and district accountability calculations. Schools are placed in a lower accountability level if their participation rates fall below 95% in the aggregate or for a subgroup over a two-year period.

VI. Competency Determination Attainment Results

The class of 2003 was the first graduating class in Massachusetts that was required to earn a Competency Determination (in addition to meeting local requirements) to be eligible to graduate from high school. In order to earn a Competency Determination (CD), students in the classes of 2003–2009 were required to earn a scaled score of 220 (*Needs Improvement*) or higher on the grade 10 MCAS tests or retests in ELA and Mathematics.

In order to earn a CD, students in the class of 2010 through the class of 2020 must **either** earn a scaled score of 240 (*Proficient*) or higher on the grade 10 MCAS ELA and Mathematics tests or retests **or** earn a score of 220–238 on the grade 10 MCAS ELA and Mathematics tests or retests and fulfill the requirements of an Educational Proficiency Plan (EPP).

Beginning with the class of 2021, students must take next-generation tests in ELA and Mathematics to fulfill the MCAS graduation requirement in those subjects. The next-generation ELA and Mathematics test results are reported on a different scale and use new achievement levels. During the transition to the new tests, the minimum passing standard is currently set at the equivalent of last year's minimum passing standard. In other words, students who took the new tests for the first time in spring 2019 must meet the same MCAS graduation requirements as the classes who came before them.

To be eligible to receive a high school diploma, students in the classes of 2021 must meet the following MCAS graduation requirements (in addition to meeting all local graduation requirements):

- pass the next-generation ELA and Mathematics tests in one of two ways:
 - earn a next-generation score that is comparable to a score of *Proficient* or higher on the legacy MCAS tests; or
 - earn a next-generation score that is comparable to a score of *Needs Improvement* and fulfill the requirements of an Educational Proficiency Plan (EPP). Information on EPP requirements is available at www.doe.mass.edu/ccr/epp/
- pass the Science and Technology/Engineering test in one of the following ways:
 - earn a score of 220 (*Needs Improvement*) or higher on one of four high school MCAS subject tests in Biology, Chemistry, Introductory Physics, or Technology/Engineering

Table 17 displays the cumulative percentage of all students and student groups in the Class of 2021 who have already met or partially met the MCAS requirement for graduation by performing at the *Needs Improvement* level or higher in ELA, Mathematics, and STE through the spring 2019 test administration. In 2019, 87 percent of students in the Class of 2021 performed at the *Needs Improvement* level or higher in all three subjects by the end of grade 10.³

³ The achievement figures for students in the Class of 2021 may be lower than the corresponding figures for grade 10 students cited elsewhere in this report because the figures for students in the Class of 2021 include students participating in a retest administration (primarily students retained in grade) while those for grade 10 students include first-time spring MCAS administration testers only.

Table 17: Percentage of Students in Class of 2021 Who Passed the High School MCAS Tests

Subgroup	Class of 2021					Class of 2020 ^a	Class of 2019 ^a
	ELA	Math	ELA and Math	STE	All Three Tests	All Three Tests	All Three Tests
All Students	95	90	89	93	87	87	88
Gender							
Female	96	92	91	94	89	89	89
Male	94	89	87	91	85	86	86
Non-Binary	96	91	91	94	91	N/A	N/A
Race/Ethnicity							
African American/Black	91	82	80	87	77	78	78
Asian	97	96	95	96	94	93	93
Native Hawaiian or Pacific Islander	96	90	90	90	88	88	84
Hispanic or Latino	88	80	77	83	73	72	71
Multi-Race, Non-Hispanic or Latino	96	91	91	94	89	89	89
Amer. Ind. or Alaskan Nat.	93	88	86	92	83	84	86
White	97	94	94	96	92	93	93
Student Status							
High Needs ^b	89	80	78	84	74	74	74
Non-Disabled	97	95	94	96	93	92	93
Students with Disabilities	85	69	67	77	63	64	64
English Learner (EL)	68	61	49	62	43	44	40
Former EL ^c	98	90	92	94	88	87	86
EL and Former EL	79	73	66	74	61	59	54
Economically Disadvantaged ^d	89	80	78	84	74	75	75
^a To provide comparable data, results for the Classes of 2020 and 2019 are based on MCAS tests through the spring 2018 and spring 2017 administrations, respectively.							
^b Beginning in 2015, the High Needs group included students with disabilities, English learner and former English learner students, and economically disadvantaged students.							
^c Beginning in 2018, the Former English Learner group included students who exited EL status over the previous four-year period; prior to 2018, this group included students who exited EL status over the previous two-year period.							
^d Beginning in 2015, the Economically Disadvantaged student group replaced the Low Income student group.							

Testing Requirement in ELA, Mathematics, and STE through the Spring 2019 Administration

Table 18 shows the number and cumulative percentage of students in the Class of 2021 who have already fully met the CD standard by performing at the *Proficient* level or higher in both ELA and Mathematics and by performing at the *Needs Improvement* level or higher in STE, through the spring 2019 test administration. The table also shows the number and percentage of students who have met individual components of the CD requirement.

Table 18: Number and Percentage of Students in Class of 2021 Scoring *Proficient* or Higher in ELA and Mathematics and *Needs Improvement* or Higher in STE through the Spring 2019 Administration

CD Requirement	Number	Percent
Earned CD	54,533	74
ELA and Mathematics <i>Proficient</i> or Higher	54,781	75
ELA <i>Proficient</i> or Higher	65,179	89
Mathematics <i>Proficient</i> or Higher	55,664	76
STE <i>Needs Improvement</i> or Higher	67,787	93